

REMARKS

Applicants have amended the specification to include sequence identifiers. No new matter has been added. Thus, entry of the amendment is respectfully requested.

Respectfully submitted,

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MARKED UP VERSION ATTACHED TO AMENDMENT IN
SERIAL NO. 09/869,176

Marked up version of the paragraph starting at page 6, lines 5-16 is below:

Transgenic plants expressing L3 or an L3 mutant exhibit broad spectrum resistance to viruses and fungi. L3 nucleic acids useful in the present invention may be obtained from a variety of natural sources including yeast, higher plants and animals. By the term "exogenous" it is meant in addition to the native genome of the plant. By the term "homologous" it is meant within the same species of organism (e.g., introducing a tomato gene encoding L3 into a tomato). Thus, the present invention embraces transgenic plants producing multiple copies of its own endogenous L3 gene. By "heterologous" it is meant that the L3 gene is derived or obtained from a different species of organism from the plant (e.g., an L3 nucleic acid derived from yeast or another higher plant species). Thus, "exogenous" embraces homologous and heterologous L3 nucleic acids. The nucleotide sequence (SEQ ID NO: 1) and corresponding amino acid sequence (SEQ ID NO: 2) of the yeast wild-type L3 protein (known as rpl3) are set forth below.

Marked up version of the paragraph starting at page 10, lines 23-27 is below:

L3 nucleic acids cloned from *Arabidopsis* and rice are described in Kim, *et al.*, Gene 93:177-182 (1990), and Nishi, *et al.*, Biochim. Biophys. Acta 1216:110-112 (1993) respectively. Tobacco contains two L3 genes. The nucleotide sequence (SEQ ID NO: 3) and corresponding amino acid sequence (SEQ ID NO: 4) for one tobacco L3 protein (the tobacco "8d" L3 protein) are set forth below:

Marked up version of the paragraph starting at page 14, lines 33-34 is below:

The nucleotide sequence (SEQ ID NO: 5) and corresponding amino acid sequence (SEQ ID NO: 6) for the second tobacco L3 protein (the tobacco "10d" L3 protein) are set forth below.

Marked up version of the paragraph starting at page 18, lines 38-42 is below:

The nucleotide sequence (SEQ ID NO: 7) and corresponding amino acid sequence (SEQ ID NO: 8) for a spontaneously occurring mutant L3 gene obtained from the yeast *Saccharomyces cerevisiae* (the L3 trichodermin resistance mutant (tcm1)) are set forth below. One nucleotide change G765C results in the amino acid change W255C (Trp255Cys). See, Schultz, *et al.*, J. Bacteriol. 155:8-14 (1983).

Marked up version of the paragraph starting at page 24, lines 11-14 is below:

The nucleotide (SEQ ID NO: 9) and corresponding amino acid sequences (SEQ ID NO: 10) for one Mak mutant of L3 are set forth below. Two nucleotide changes, G765C and C769T, result in two amino acid changes, namely W255C (Trp255Cys) and P257S (Pro257Ser) respectively. This mutant L3 is designated Mak8 (W255C, P257S).

Marked up version of the paragraph starting at page 28, lines 23-25 is below:

The nucleotide (SEQ ID NO: 11) and corresponding amino acid sequences (SEQ ID NO: 12) for another L3 mutant ("rpl-T845C") are set forth below. One nucleotide change, T845C, results in the amino acid change I282T (Iso282Thr).

Marked up version of the paragraph starting at page 46, lines 15-27 is below:

BlueScript KS plasmid was obtained from Strategene. The pRS series of plasmids (10,47) and pAS134 (1) have been previously described. Full length *RPL3* and *mak8-1* were amplified from genomic DNA by polymerase chain reaction using the oligonucleotide primers -300 *Kpn* I (5' CCCC GG TACCTCACGCACACTGGAATGAAT 3') (SEQ ID NO: 13) and +1300 *Sac* I (5' CCCC GAGCGCAACCTCCATTTTGGACTTGG 3') (SEQ ID NO: 14), and were cloned into the pRS300 series (pRS314, pRS315 and pRS316) digested with *Kpn* I and *Sac* I to make the pRPL3 and the pmak8-1 series of plasmids. To construct aRPL3

gene disruption plasmid, the *Kpn* I/*Sac* I *RPL3* clone was subcloned into BlueScript KS (KS-RPL3), digested with *Sph* I, the overhanging ends were filled with dNTPs using T4 DNA polymerase, and was then digested with *Xba* I. Subsequently, pAS134 was digested with *Xba* I and *Pvu* II to liberate the *hisG-URA3* cassette which was subcloned into the *Xba* I/blunt ended KS-RPL3 to create pJD168.